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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|------------------------|-----------------------|------------------|
| 09/932,261 | 08/17/2001 | Cornelius Van Rensburg | 47586/P067US/10106269 | 3117 |

29053 7590 08/26/2005

DALLAS OFFICE OF FULBRIGHT & JAWORSKI L.L.P.
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DALLAS, TX 75201-2784

EXAMINER

GANTT, ALAN T

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2684

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,261

Applicant(s)

RENSBURG ET AL.

Examiner

Alan T. Gantt

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-45 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 10-14 is/are rejected.
- 7) ☒ Claim(s) 6-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 11/24/04 have been fully considered but they are not persuasive. Applicant primarily argues that the examiner is imposing a feature on the Kuwahara reference that is not suggested by Kuwahara and relying on hindsight. The applicant states that Kuwahara uses averages of the array response vectors to track the position of the mobile unit and does not estimate speed and thus, requests a reference to show speed estimation. Therefore, a new reference is offered that meets this limitation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 and 10-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Scherzer et al.,

Regarding claim 1, Scherzer discloses a system that selects multiple communication beams for simultaneous use such that potential scatters are not illuminated by simultaneous transmissions. Scherzer utilizes a forward beam forming process that utilizes array response

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vectors from subscriber systems as measured on the reverse link, such as integrating each subscriber system's reverse link dedicated pilot for a specific integration interval. The measured array response vectors are used in determining a fading rate profile such as may be associated with movement speed. Thus, Scherzer meets the following limitation:

a speed estimator providing speed information with respect to a subscriber unit determined from a reverse link; (col. 7, lines 44-55)

a beam selector providing selection of a beam configuration for use in a communication link with respect to said subscriber unit from a plurality of beam configurations using said speed information. (col. 8, lines 16-32 and col. 9, lines 46-65)

Regarding claim 2, Scherzer meets the limitation - The system of claim 1, further comprising: a signal integrator providing said array response vector information. (col. 7, lines 44-55)

Regarding claim 3, Scherzer meets the limitation - The system of claim 2, wherein said array response vector information includes a plurality of array response vectors each of which represents a path from a particular subscriber unit to said communication link (col. 18, lines 23-56).

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Regarding claim 4, Scherzer meets the limitation - The system of claim 3, wherein said signal integrator integrates a unique pilot signal of said subscriber unit to provide an array response vector of said array response vector information.(col. 7, lines 44-49)

Regarding claim 5, Scherzer meets the limitation - The system of claim 3, wherein said signal integration circuitry integrates a uniquely coded signal of said subscriber unit to provide an array response vector of said array response vector information. (col. 7, lines 35-55 –CDMA systems)

Regarding claim 10, Scherzer meets the limitation - The system of claim 1, wherein said speed estimator determines said speed information as a function of a fading estimate (col. 7, lines 49-55).

Regarding claim 11, Scherzer meets the limitation - The system of claim 10, wherein said fading estimate is determined using a difference between a first array response vector of said array response vector information and a second array response vector of said array response vector information.(col. 7, lines 44-55 –inherency)

Regarding claim 12, Scherzer meets the limitation - The system of claim 10, wherein said first array response vector and said second array response vector are associated with said subscriber unit at different points in time. (col. 7, lines 44-55 –inherency)

Regarding claim 13, Scherzer meets the limitation - The system of claim 1, wherein said communication link comprises a forward link.(col. 6, lines 43-65)

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Regarding claim 14, Scherzer meets the limitation - The system of claim 1, wherein said communication link comprises a reverse link.(col. 13, lines 5-18)

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 15 and 33, although Scherzer includes the capability of using array response vectors to determine a fade profile which can translate to movement speed, the mapping of beam merit information to a selected optimum beam configuration as a function of the speed information was neither found, suggested, or made evident by the prior art.

Regarding claim 44, although Scherzer uses merit information in beam configuration selection, the use of speed information, especially speed information gathered from the array response vector information was neither found, suggested, nor made evident by the prior art.

Claims 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 6, a beam configuration analyzer providing beam merit information for a plurality of beam configurations using array response vector information and weighting this beam merit information by a beam selector using speed information for selection of the beam configuration was neither found, suggested, nor made evident by the prior art.

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Conclusion

Any inquiry concerning this communication from the examiner should be addressed to Alan Gantt at telephone number (571) 272-7878. The examiner can normally be reached between 9:30 AM and 6 PM within the Eastern Time Zone. The group FAX number is (571) 273-8300.

Any inquiry of a general nature or relating to this application should be directed to Supervisory Patent Examiner Nay Maung at telephone number (571) 272-7882.

Alan T. Gantt

Alan T. Gantt

August 19, 2005

Nick Corsaro
NICK CORSARO
PRIMARY EXAMINER